IP TELEPHONE

VOISPEED V-IP400P

User Manual

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Declaration of conformity can been found at this internet address:
http://www.voispeed.com/products/conformity/V-IP400P_DDC.pdf

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2 - Introduction

Welcome to VOIspeed V-IP400P user manual. We would like to thank you for your purchase and for having chosen one our products. This manual provides general guidelines for a correct use of the product. In case you require further information on this product or to receive technical assistance please visit our website: www.voispeed.com.

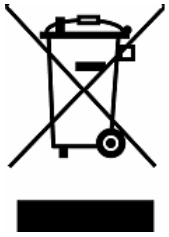
2.1 - Security Information

Please read the security rules below. You should comply with these guidelines when using this device. Please comply with these guidelines to avoid taking unnecessary risks.

	Use the device only in the standard working position.
	Any installations or repairs on the product should be carried out only by qualified and fully trained personnel.
	Use only accessories that are fully approved by The Manufacturer. Do not connect to any non compatible products.
	The device is not waterproof. Avoid contact with liquids.
	If you connect the device to other devices please read the user guide of the new equipment first. Do not connect the device to any non compatible products.
	Avoid prolonged exposure to direct sunlight. Do not place the device near sources of intense heat (e.g. radiators, fire, etc.) and near electronic equipment producing strong magnetic fields (speakers, microwaves ovens, etc.). Do not install the device in humid rooms and avoid contact with liquids. Do not expose the device to aggressive gas and do not use it in too dusty environments. Never use the device in presence of any explosive gas (e.g. methane). Refrain from opening any parts of the product and do not touch the plugs with metal or sharp objects.
	Please make sure that the power supply complies with the voltage setting of your equipment. If you have any doubts about the voltage setting, please

	call the technical support. Do not remove any security devices. Always disconnect the telephone from the power supply during storms. All maintenance work should be carried out by qualified personnel.
	We suggest cleaning the equipment only using a slightly dump cloth.

2.2 - Product Disposal



Our products are compliant with the European Directives 2002/95/CE, 2002/96/CE and 2003/108/CE regarding the limitation of use of lead, mercury, cadmium, chromium (VI) as well as some flame retardants and hazardous material within electric and electronic equipment and disposal.

The sign above representing a crossed waste bin indicates that the product, once no longer utilised, must be disposed of by separating it from any normal waste. The user must ensure that the product, once reached its end-life, is given to qualified organisations responsible for the collection of electronic and electrical waste. The user may otherwise choose to return the equipment to the manufacturer when purchasing a new equivalent device. In this case the product returned must correspond to the one being purchased. Suitable disposal of the equipment in accordance with relevant recycling guidelines helps the environment and fosters sustainable development. Unlawful disposal of this equipment is an offence and may lead to prosecution in accordance with the Country's laws in which the disposal takes place.

Correct disposal benefits us and the environment.

2.3 - Product Warranty

The Manufacturer (Harpax Srl.) warrants its products to be free from defects in material and workmanship during the warranty period. The product is covered by warranty only if it is used in compliance with the guidelines contained in this manual. This warranty will be invalidated in case of manumission, wrong use of the product or accidental damage. This product is compliant with CE regulations.

The warranty period starts from the date the product has been purchased (stated on the invoice) and will last for twelve (12) months thereafter. If a product proves to be defective in material or workmanship during the warranty period, The Manufacturer will, at its sole discretion, repair or replace the product with a similar one (new or re-conditioned). The replacement unit will be covered by a new warranty period that will last the remaining time on the customer's original limited warranty. The old equipment substituted will automatically become property of Harpax Srl.

In order to have access to the warranty the user must fill out the online form that can be found on www.prontopbx.com or www.voispeedltd.com (please also contact the customer support department on 01727 848186). The user must provide a valid invoice to claim warranty on the product.

Exclusions.

The warranty will be invalidated in the following cases:

- **Damages to any parts that are meant to ware out with time. No support, maintenance or replacement will be provided for these components.**
- **Damages resulting from using a wrong power supply.**
- **Damages resulting from misuse or actions that do not comply with the guidelines of this manual.**
- **Damages resulting from lack of maintenance as advised by The Manufacturer.**
- **Damages resulting from installing or using the product without complying with the relevant standards (legal, health and safety, technical, etc.) that are in place in the Country where the product is utilised.**
- **Damages resulting from misuse, negligence, unauthorized product modification, repair or attempted repair by anyone not authorized by The Manufacturer (including the user) or failure to follow instructions supplied with the product.**
- **Damages caused during product transportation or delivery due to insufficient or inappropriate packaging.**
- **Damages caused by accident, fire, water, any acts of nature, insufficient ventilation or other causes that don not fall under the control of The Manufacturer.**
- **Damages caused from any unintentional or deliberate human acts.**
- **Damages caused from manumission or in conjunction with warranty labels being broken.**
- **Damages to Software or any Hardware component not supplied by The Manufacturer with the product.**

This warranty is only valid within the European Community.

3 - Main Requirements

3.1 - Description

V-IP400P is a stand-alone device that requires no connection to a PC to make phone calls. As well as providing the same features of a traditional telephone, the V-IP400P supports both data and voice through the IP network. The V-IP400P guarantees clear and reliable voice quality over any IP network. It is fully compatible with SIP industry standard and provides full interoperability with VOIspeed-based systems. The integrated switch allows you to connect an additional IP device to the LAN through the second Cat5e socket.

The telephone offers the following functionalities:

- Power over Ethernet
- Multiple ring-tones
- Internal contact list
- Text messaging

3.2 - General Specifications

Power Supply	IN	100-240V AC
	OUT	5V DC 1A
Ports	PC	1 – 10/100Base T RJ-45 802.3af compatible (mode B)
	LAN	1 – 10/100Base T RJ-45
	MOD	To connect the external memory extension V-IP400E
CPU		150 MHz
Power		<2W
Temperature		0□50°C
Humidity		5□65%
Dimensions		240mm x 184mm x 120mm

3.3 - Display

The V-IP400P features a backlit LCD (blue). When in standby (and with no active alarms) the LCD would normally display time and telephone's name. New events (e.g. incoming calls) or errors (e.g. undetected DHCP) are promptly displayed on the LCD.

3.4 - Main Functionalities

The V-IP400P features all the functions of a traditional phone. In addition, when used in conjunction with a VOIspeed PBX, more advanced functionalities are available:

- Network protocols: TCP/UDP/IP, HTTP, DHCP Client, FTP/TFTP, DNS, ARP, ICMP
- Power Over Ethernet: 802.3af (Mode B)
- Switch (DHCP or static IP) over two 10/100Base T RJ-45 ports
- Standard Encryption and authentication (DIGEST using MD5)
- Firmware upgrading via TFTP/FTP and HTTP
- Syslog: the phone can send events with debugging information to a syslog server with increased level of detail
- VoIP protocols: SIP (RFC3261 e RFC2543)
- SDP (RFC2337)
- Voice Codec: G.711 (A-law/U-law), G.729, G.723-r63 e G.723-r53
- Jitter Buffer
- DTMF standard: relay, RFC2833 and SIP info
- G.168 echo cancellation
- Voice Activity Detection (VAD)
- QoS supporting TOS / DiffServ
- Outbound proxy for NAT Transversal
- Caller ID
- Call on hold
- Call forwarding (blind/attended)
- Do not disturb

- Hot key: a predefined number is dialled as soon as the handset is lifted
- Redial
- Conference call on three channels
- Auto Answer
- Possibility to define dialling rules
- Call log: incoming/outgoing/missed calls
- Contact list with 8 ringtones
- Full duplex speakerphone
- Multiple ringtones (8)
- Volume control for microphone and speaker (handset/speakerphone)
- Internal contact list (up to 100 contacts) accessible through the keyboard
- 10 memory buttons with extension status (only available with VOIspeed PBX) and multiple ring-tones
- Automatic dialling on engaged line (only available with VOIspeed PBX)

3.5 - Package Content

- One V-IP400P (body)
- One Handset with cable
- One network cable UTP RJ45 CAT5 (1.5 mt.)
- Mounting supports
- One power supply 9V 600mA
- User manual

4 - How to use the V-IP400P

4.1 - Mounting Instructions

- Remove equipment from packaging
- Connect the handset to the telephone using the cable provided
- Connect the phone to the switch/router/hub through the Ethernet port using a UTPS cable with RJ45 connectors (not crossed).
- If required connect the additional Ethernet port to a second network device.
- Connect the power supply (provided) in case the network does not support power over Ethernet (standard PoE 802.3af (Mode B).

4.2 - General Requirements

Make sure that both your server and the network are operating correctly before connecting the phone.

> **Note:** you will need to create a new user at the server PBX in order to register the phone onto the network.

4.3 - Phone Description

Please find below a description of the main functions of the V-IP400P buttons.

BUTTON	DESCRIPTION
KEYPAD	The keypad is used to enter numbers and characters (both upper and lower case).
SYSINFO	Displays general information: extension number, phone and gateway IP address. Hold the button to access this information. Press again to move to the next item.
OK	Press OK to confirm a selection or browse the menu'.
EXIT	Press to exit the menu', refuse an incoming call or erase data.
MENU	Press to enter the main menu'.
UP	Press to browse menus and settings or to increase the volume during a conversation.

DOWN	Press to browse menus and settings or to decrease the volume during a conversation.
DEL	Press to delete the last character entered, delete stored messages, call logs or other settings.
DIAL	Press to re-dial the last number entered, dial a new number or a number linked to a contact in the list.
SPEAKER	Press to enable the speakerphone.
CALL LIST	Press to access call logs or list of text messages.
PHONE BOOK	Press to access the list of contacts.
REC	Start/Stop call recording (only available when used in conjunction with VOIspeed PBX).
HOLD	Press to place a call on hold.
TRANSFER	Press to transfer an active call.
M1 … M10	These memory buttons can be linked to extension numbers. Their LEDs will display the state of each extension (only when used in conjunction with VOIspeed PBX). They can also be used to pick up an incoming call or another extension (see section 4.5 -).

4.4 - Main Functionalities

The V-IP400P offers easy access to the general functionalities available in a traditional phone in addition to advanced features when used in combination with a VOIspeed PBX.

4.4.1 - Making a call

There are multiple ways to make a phone call:

- Lift the handset (or press **SPEAKER**), enter a new number and then press **DIAL**.
- Lift the handset (or press **SPEAKER**) and press **DIAL** to call the last number entered.
- Lift the handset (or press **SPEAKER**) and press one of the memory buttons.
- Lift the handset (or press **SPEAKER**), select a contact in the internal list and press **DIAL**.

- Browse the call logs and press **DIAL** (the call will automatically start using the speakerphone).

By using the web interface you can link the 'ash' ('#') key to the **DIAL** button. Both keys have the same function by default. You can also determine a fixed amount of time after which a call is automatically started following the last key being entered (default value: 5 seconds).
With the V-IP400P you can also define some preset rules to enter a number and automatically start a call (see section 6.5.1 - for more information).

4.4.2 - Reject an incoming call

Press **EXIT** to reject an incoming call either in stand-by or during a conversation (in order to reject a second incoming call).

4.4.3 - Put a call on-hold

Press the **HOLD** button to put an active call on-hold (the display will show 'PLEASE DIAL'). Press HOLD again to retrieve the call or enter a new number and press **DIAL** to start a new call. Press '#' key to terminate the new call (not the call on hold).

Note: if no number is entered within 10 seconds of pressing **HOLD**, the system will emit a continuous tone and the message 'PLEASE HUNG-UP' is displayed. No further keys can be entered and the user can only retrieve the call by pressing **HOLD** again.

4.4.4 - Call Forwarding

Calls can be transferred with or without supervision ('blind' transfer). Transferring a call with supervision entails placing the active call on hold, dialling a new number and then pressing the **TRANSFER** button. The handset can then be replaced. With blind transfer the call is not placed on hold. The user will simply need to press **TRANSFER**, enter a number and then replace the handset.

Note: when the V-IP400P is used in combination with a VOIspeed PBX, a call that fails to transfer is sent back to the first user after a preset amount of time.

4.4.5 - Three user conference

Firstly, place an active call on hold. Secondly, start another call and then press the star ('*') key to start a conference call. Replace the handset to terminate the conference.

4.4.6 - Call pick-up

The V-IP400P can be used to pick-up an active call directed to an extension linked to one of the memory buttons. When an extension starts ringing (flashing amber LED), lift the handset and press the relevant memory button to pick-up the call. A pre-recorded voice will ask to replace the handset in order to direct the call to the V-IP400P.

Note: this feature is only available when the V-IP400P is used in conjunction with a VOIspeed PBX.

4.4.7 - Call Recording

Press the **REC** button during an active call in order to record a conversation. The recording is stored in the user's vocal box.

Note: this feature is only available when the V-IP400P is used in conjunction with a VOIspeed PBX.

4.4.8 - Speakerphone

Press **SPEAKER** before or during a conversation in order to activate the speakerphone.

4.4.9 - How to change the volume settings

Press **UP** and **DOWN** buttons during an active call in order to modify the volume. The relevant level is displayed on the LCD.

4.4.10 - Text Messaging

The V-IP400P supports SIP text messaging. A new incoming message is displayed showing the sender's extension on the first row and the content in subsequent rows. Press **EXIT** to store the message and exit or **DEL** to erase the message. Press **CALL LIST** to see the list of saved messages (press **UP** and **DOWN** to browse the list or **DEL** to delete the message). Only 20 messages can be stored in the V-IP400P memory. When this limit is reached old messages are automatically replaced by new one.

Note: incoming messages are not displayed in case the LCD is informing the user that an incoming call was lost.

4.5 - Memory Buttons M1 – M10

The V-IP400P features 10 memory buttons with associated LEDs. These memory buttons can be further extended using the V-IP400E expansion module bringing the total number of buttons to 30. Each button can be linked to an extension with the LED displaying its status.

4.5.1 - Setup

Press DEL and then one of the memory buttons in order to add or modify the extension's number associated to the memory button. Enter the extension number (press DEL to erase any of the digits entered) and press OK to confirm or EXIT to cancel. The same settings can be entered using the telephone web interface (see section 6.5.4 -).

4.5.2 - Extension Status

When a memory button is linked to a PBX extension, the corresponding LED will display the extension's status according to the table below:

STATUS	LED
Free	Green
Engaged	Red
Ringing	Flashing Amber
Do not disturb	Flashing Red

When used in combination with a VOIspeed PBX, the memory buttons can be used to pick-up an incoming call directed to another extension (see section 4.4.6 -). In this case the LED associated to that extension will be flashing (amber) to indicate that it is ringing.

You can link the extension number of the V-IP400P to one of the memory buttons. In this case you will need to press one of the memory buttons, then star ('*') and ash ('#') keys in succession and enter the extension number. When the V-IP400P is used with a VOIspeed PBX, the LED (associated to that memory button) will show the status of the V-IP400P according to the table below:

STATUS	LED
Free	Green
Voice Mail	Amber
Call Divert	Flashing Green
Do not disturb	Flashing Red
Telephone blocked	Red

4.6 - Contact List

The V-IP400P internal contact can store up to 100 contacts. Each one can be linked to a different ring-tone. Press **PHONE BOOK** to access the contact list followed by one of these commands: **SHOW** to browse the list in alphabetical order, **ADD** to enter a new contact and **SEARCH** to retrieve a contact in the list.

When selecting **SHOW** you can browse the list using the **UP** and **DOWN** keys. Press **DEL** to delete or modify an entry. When selecting **ADD** you can then enter the name of the contact, its telephone number and the ring-tone to be linked to that contact (select a value between 0 and 8, with 0 as default ring-tone). When selecting **SEARCH**, the phone prompts the user to enter a string that will be matched against the entries in the contact list. Any matches are displayed in alphabetical order.

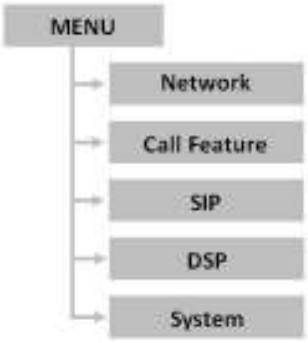
4.7 - Call Logs

The V-IP400P stores information about all incoming/outgoing/missed calls together with a list of the last 20 text messages received. Press **CALL LIST** to access call logs and messages and press **UP** or **DOWN** to browse amongst these options: **DIALLED** (list of outgoing calls), **RECEIVED** (list of incoming calls), **MISSED** (list of missed calls) and **MESSAGES** (list of stored messages). You can browse each list using **UP/DOWN** or you can delete an entry pressing **DEL**. Press EXIT to go back.

5 - Manual Setting

Press **MENU** to access the V-IP400P main menu' and use the button **UP**, **DOWN**, **OK** or **EXIT** to navigate the menu'. To access the menu' you will need to enter a numeric password that can be changed using the phone's web interface (see section 6.8.1 - default value: 123).

The main menu' is structured into 5 sections: **Network** (network interface), **Call Feature** (call settings), **SIP** (SIP interface), **DSP** (advanced settings) and **System** (system settings).



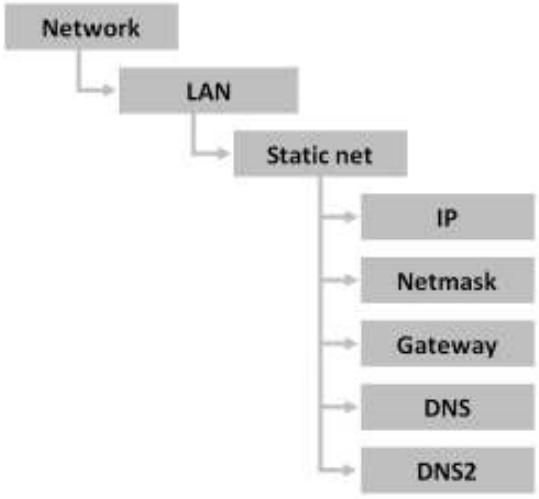
Note: press UP and DOWN to browse the options, OK to select an option and EXIT to go back. Press OK to display a setting and DEL to modify it.

5.1 - Network Interface

The V-IP400P acquires its settings from the DHCP server connected to the LAN. Press SYSINFO to display these settings. In case no DHCP server is available or in order to assign a static IP address to the V-IP400P, you will need to modify the way the phone has access to the network. In this case you will need to press the key '**1**' until '**Static Mode**' is displayed. Hold the key '**2**' until '**DHCP Mode**' is displayed in order to go back to the default settings. When in '**Static Mode**' the following settings are assigned to the phone:

- Network address: 192.168.1.179
- Network mask (netmask): 255.255.255.0
- Gateway: 192.168.1.1
- DNS Server: 202.96.134.133
- Alternative DNS server: 202.96.128.68

To modify any of these settings you will need to access the main menu and then enter the **Network** section, select **LAN** and then **Static Net**.



Here you can select or modify each of these settings (press **OK** to select a setting and **DEL** to modify it, use * in place of dots).

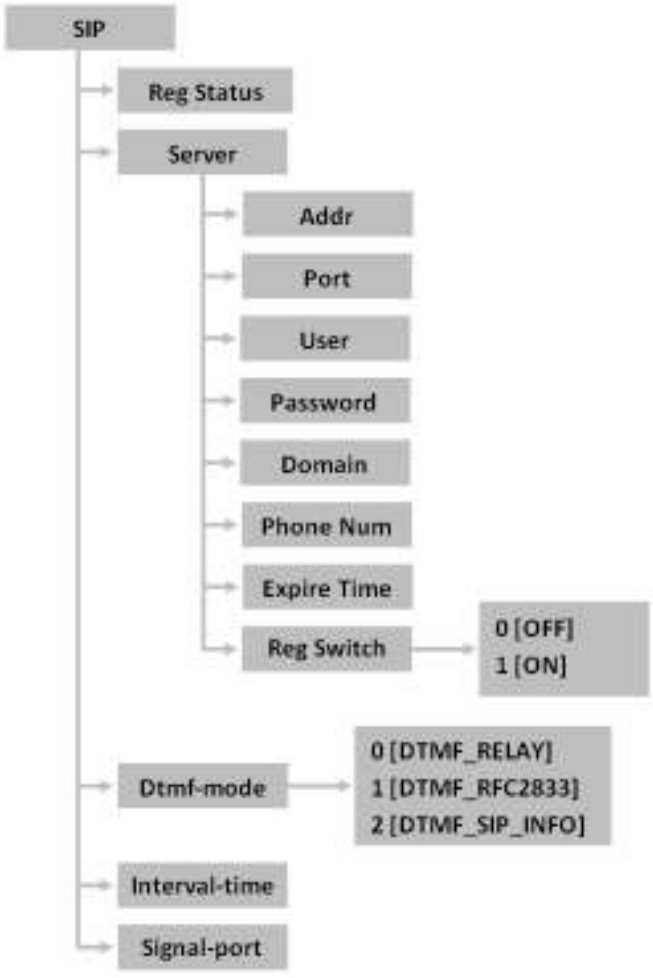
5.2 - SIP Interface

Once the network interface is operating correctly, the V-IP400P can register onto the PBX. In this case you will need to access the telephone's SIP settings. All the details required for the registration are available in the **Server** sub-menu'.

ENTRY	DESCRIPTION
Addr	Server PBX IP Address.
Port	PBX port used to exchange SIP messages (default value: 5060).
User	Username for the authentication at the server.
Password	Password for the authentication at the server (the value is hidden using *).
Domain	PBX Server Domain. Same as 'Addr' for VOIspeed PBXs.
Phone Num	V-IP400P extension number.
Expire Time	The registration of the V-IP400P at the PBX is performed at regular intervals of time. This parameter determines the duration of each interval.

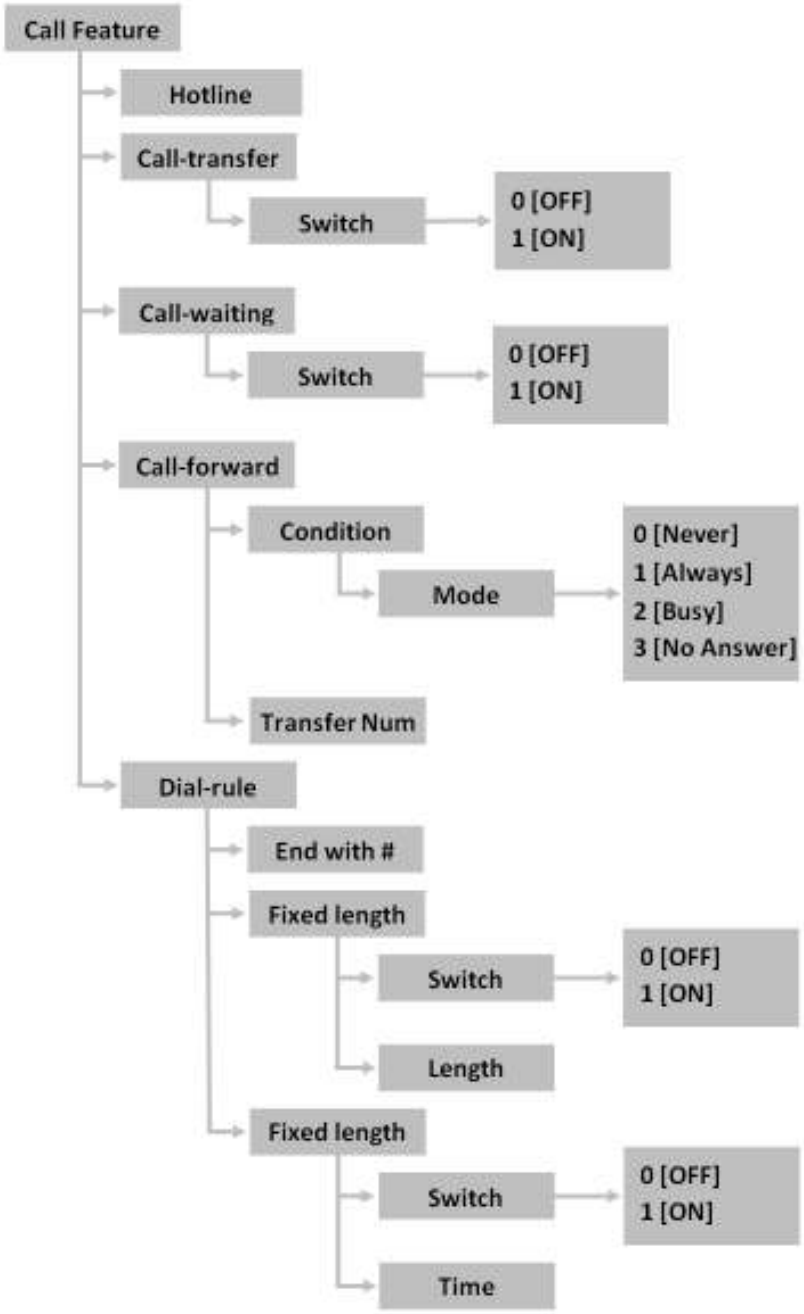
Reg Switch	Enable/Disable the phone registration at the PBX. This parameter needs to be always enabled when the phone is used with a VOIspeed PBX.

Select **DTMF-mode** to determine how the phone should manage DTMF signalling with the server. Possible settings are: **0** to send DTMF tones in audio band, **1** to use the RFC 2833 standard and **2** to send DTMF signalling using SIP protocol (in INFO messages).
Selecting **Reg Status** you can access the registration status (the same information is available by pressing **SYSINFO**).



5.3 - Call Service Settings

In the **Call Features** sub-menu you can configure all SIP enabled services offered by the V-IP400P.

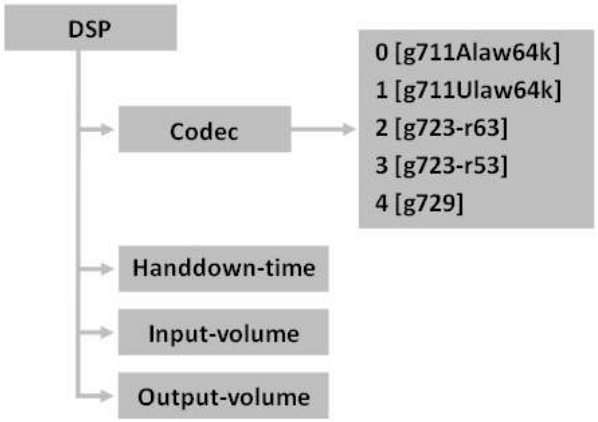


ITEM	DESCRIPTION
Hotline	Here you can enter a number that is dialled automatically as soon as the handset is lifted.
Call-transfer	Enables/Disables call-transfer (with or without supervision).
Call-waiting	Enables/Disables call queuing of any incoming call during an active call. When enabled, a queued call is notified to the user through an acoustic signal and a message on the display.

Call-forward	Below are the options available for call forwarding: • **0** to disable call forwarding • **1** to forward all incoming calls • **2** to forward an incoming call only when the line is engaged (in this case Call-waiting should be disabled) • **3** to forward an incoming call only when it is not answered within a pre-defined amount of time (this delay needs to be set through the web interface)
Dial-rule	There are three ways for the V-IP400P to start dialling a number once it has been typed in: • The number is dialled as soon as the ash ('#') key is entered • The number is dialled following a pre-determined number of characters • The number is dialled after a pre-defined time-out Here you can select one of the three options.

5.4 - Advanced Settings

In the **DSP** sub-menu you can access the advanced settings of the phone.

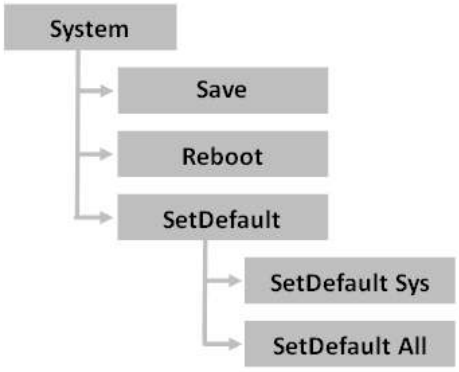


- **Codec:** here you can select the voice codec being used.
- **Handdown-time:** determines the time (in milliseconds) after which the call should be terminated following the handset being replaced.

- **Input-volume** and **Output-volume:** determine the audio level to and from the server PBX.

5.5 - System Settings

Once the V-IP400P has been fully configured we recommend saving all changes and reboot the phone. This action can be performed in the **System** sub-menu.



Here you can also restore all default settings and in particular the network settings. This option should be considered in case the telephone is not operating correctly.

NOTE After rebooting all unsaved changes will be lost. Furthermore, call logs and message lists will also be erased from the internal memory.

5.6 - Telephone Status

Press **SYSINFO** to display the telephone's internal status. By pressing this button multiple times, the phone will display the following information:

- The extension number associated to the phone (**Number**).
- The telephone's IP address (**DHCP** or **Static**).
- Whether the phone is currently registered at the server PBX or not (**SIP**).
- The Server PBX's IP address (**SIP SERVER**).
- The Network Gateway (**Gateway**).
- The Network Mask (**Netmask**).

Knowing the telephone's IP address is of particular importance in order to access the web interface (see chapter 6 - in this manual)

5.7 - Resetting the telephone

It is possible to reset the V-IP400P without accessing the web interface or any of the internal menus. This procedure is particularly useful when there are no other ways to access either interfaces. Please follow these steps:

- Turn off and then on the V-IP400P.
- Press the ash ('#') key as soon as the display shows a sequence of characters 'P'. This will set the phone in POST mode (the display will then show "Post mode").
- Enter ***#168** and press **OK**.
- Turn off and then on the V-IP400P.

The telephone will upload its default settings.

NOTE After resetting the telephone all its internal data will be lost!

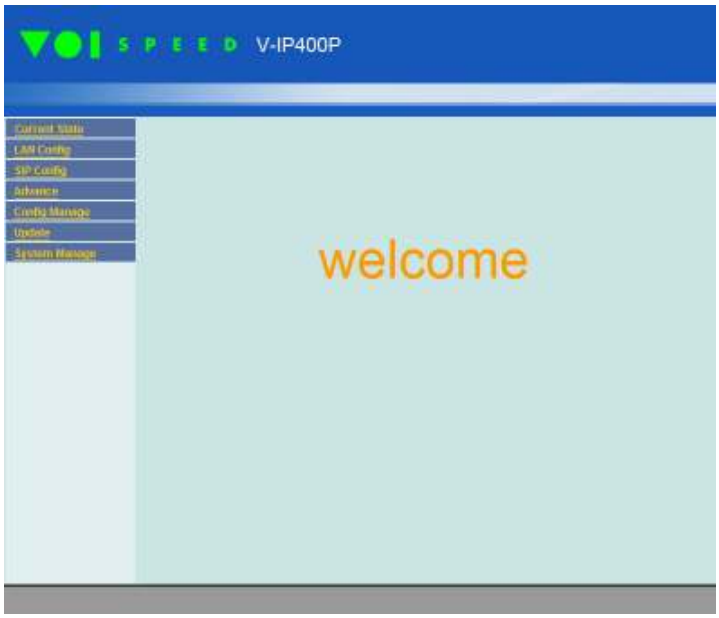
6 - WEB Interface

To access the telephone's web interface you should enter the string **http://** followed by the phone's IP address. Press the **SYSINFO** button in order to find the phone's IP address.

NOTE It is important that the PC from where you are trying to access the web interface is connected to the same network of the phone.

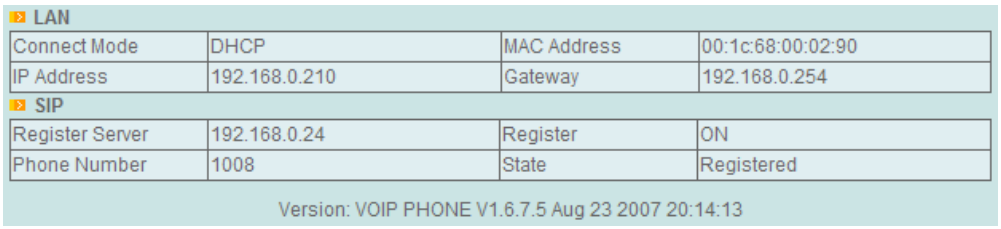
6.1 - Logon

To access the web interface you need to enter valid **username** and **password** (default values are respectively "**admin**" and "**admin**"). We recommend changing username and password after the first access. All menu options are described below.



6.2 - Current State

Here you can access the phone's general settings.

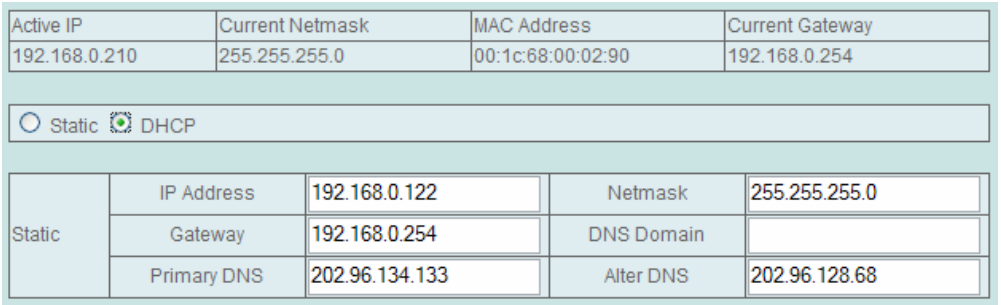


- The **LAN** section shows all network settings: how the IP address is acquired (statically or through DHCP IP address), the MAC address, the IP address and the network Gateway.
- The **SIP** section shows status and settings of the phone's registration at the server PBX.

Furthermore, here it is also possible to see the V-IP400P firmware version.

6.3 - Network configuration (LAN Config)

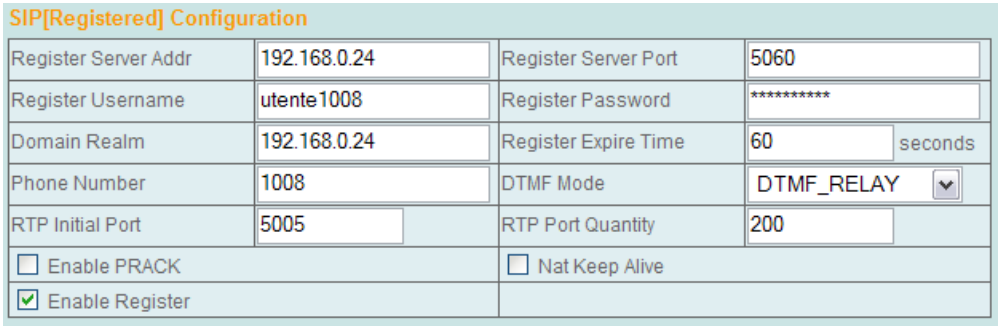
Here you will need to configure the phone's network settings. Firstly, setup how the IP address is acquired by the phone: statically or dynamically. In case **Static IP** address is selected, the network administrator will also have to setup the IP address, the Netmask, the Gateway and the DNS server. If **Dynamic IP** address is selected, the DHCP server will assign the IP address to the phone automatically. In this case you need to choose DHCP and, if required, enter the IP addresses of the DNS servers.



NOTE It is not required to configure the **PC port** of the V-IP400P. This port can either operate like a switch or be connected to a device with static or dynamic IP address (this will not affect the behaviour of the DHCP server).

6.4 - SIP User Setting (SIP Config)

In this section you can define the main SIP account settings. Firstly, you will need to create a new user at the server PBX and make sure that the firewall allows UDP traffic through port 5060 and RTP port (for audio signals). Subsequently, you will need to fill in the fields below:



Please find below the explanation of these fields.

FIELD	DESCRIPTION
Register Server Addr	IP address of the server PBX.
Register Server Port	Server PBX port used for SIP traffic.
Register Username	Username for SIP authentication.
Register Password	Password for SIP authentication.
Domain Realm	Server PBX domain. Please enter the server's IP address in case you are using a VOIspeed PBX.
Register Expire Time	Registration timeout. This is the interval of time between two authentications performed by the V-IP400P to the server PBX.
Phone Number	Telephone extension number.
DTMF Mode	This field describes how DTMF tones should be transmitted. These are the options available: in audio (DTMF_RELAY), through RFC 2833 protocol or within SIP protocol INFO messages.

RTP Initial Port	This is the RTP port used to transfer initial voice packets. The firewall needs to be configured to allow UDP traffic through RTP port.
RTP Port Quantity	Max number of ports used for audio transmission.
Enable PRACK	It enables one of the SIP protocol options.
Nat Keep Alive	This option enables to control NAT without losing the connection with the PBX.
Enable Register	It enables the registration at the server PBX.

6.5 - Advanced Settings (Advanced)

In this section you will find the range of settings that affect the performance of the telephone not its communication with the server PBX.

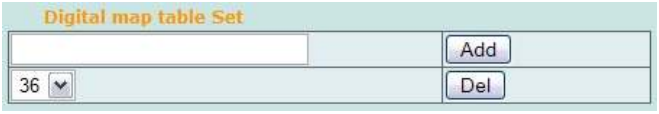
6.5.1 - Number input setting (Digital Map)

In **Digital Map** you can determine how the phone should dial a number after it has been entered on the keypad.

There are three options available in this section (tick the relevant checkbox):

- Start dialling a number after the ash ('#') key is entered.
- Start dialling after a set number of keys is entered.
- Start dialling after a set amount of time following the last key being entered.

It is also possible to define rules to quickly dial predetermined numbers.



In the field above you need to enter the rule and then press 'Add' to save it. In the text box you can enter any numbers together with any of the characters below:

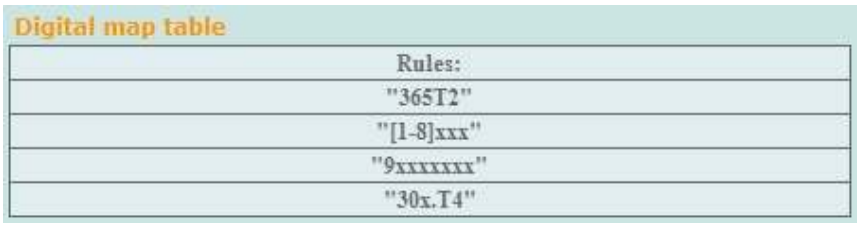
SINTAX	DESCRIPTION
x	This symbol represents any number between 0 and 9.

. (dot)	It represents a number of variable length. It must be used in combination with Tn that sets the timeout after which a call is started following the last key being entered (otherwise the call will never be dialled).
[]	It is a number within a preset range. The range can be defined as [min-max] or by listing numbers separated by commas. Example: [1,2,5] means that only 1,2 and 5 can be used whereas [1-5] means that 1,2,3,4 and 5 are allowed.
Tn	It determines the Timeout after which a call is dialled following the last key being entered. 'n' is the amount of time in seconds. Note: Tn must be placed at the end of a rule.

Examples:

- 365 The phone will automatically start a call to the number '365'. With this rule, however, the user will never be able to dial any destinations starting with '365'. Therefore you should always place a timeout after defining a number in this way (e.g. '365T2' will start a call to 365 after 2 seconds of entering '5').
- [1-8]xxx Any 4 digit number between 1000 and 8999.
- 9xxxxxxx Any 8 digit number starting with 9.
- 30x.T4 Any 3 digit number starting with 30. You also need to enter a timeout so that the telephone will start a call if no more than 3 keys are entered within 4 seconds.

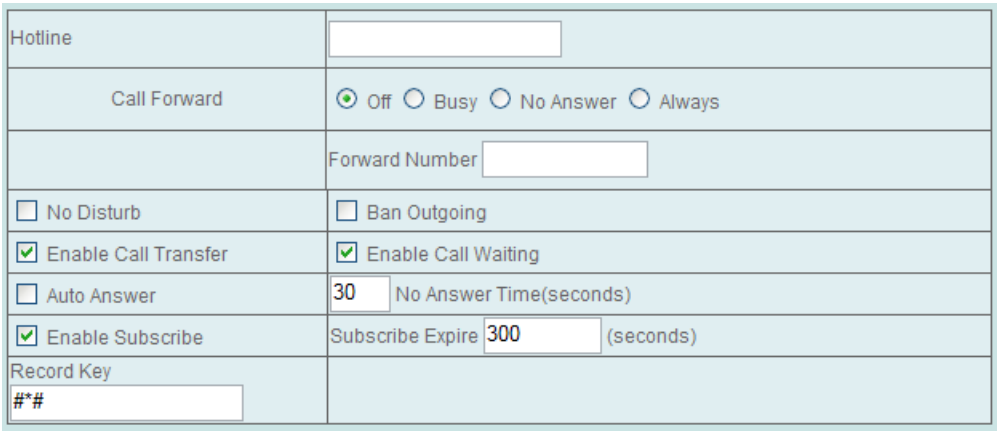
The **Digital Map Table** will list all rules saved.



To remove one of the rules you simply need to select it from the drop-down menu' and press **Del**.

6.5.2 - Call Settings (Call Service)

In the **Call Service** section you can setup all call service settings for the V-IP400P.

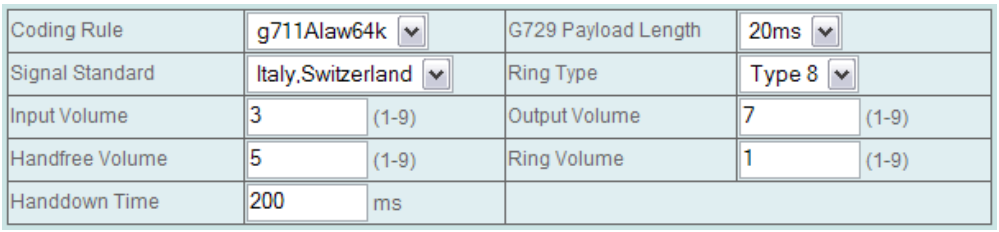


SERVICE	DESCRIPTION
Hotline	This is the number that the V-IP400P dials as soon as the handset is lifted.
Call Forward	In **Forward Number** you can enter the number an incoming call should be automatically forward to, on occurrence of one of the events below: • The line is engaged (**Busy**) • The call is not answered within a preset amount of time defined by '**No Answer Time'** (**No Answer**) • All incoming calls (**Always**) This function can be disabled by selecting **Off**.
No Disturb	When selected the phone will reject all incoming calls.
Ban Outgoing	When selected the phone will block all outgoing calls.
Enable Call Transfer	When selected the phone will be able to transfer a call (with or without supervision).
Enable Call Waiting	When selected, the telephone is able to receive a second incoming call when the line is already busy on an active call. In this case the second call is queued whilst the display shows a message and a tone is emitted by the speaker. The user can reject the second call (press **EXIT**) or put it on hold (press **HOLD**). If the call is placed in the queue, press **HOLD** again to switch from one call to the other.

Auto Answer	If enabled the phone will automatically answer an incoming call by activating the speaker after a preset amount of time (**No Answer Time**, in seconds).
Enable Subscribe	When enabled, the phone will periodically query the PBX on the status of the extensions linked to its memory buttons. To disable this function you need to switch off the phone, wait for the registration to expire and switch the telephone back on.
Record Key	This function relates to the DTMF tones sent to the PBX by the V-IP400P when the REC button is pressed (see section 4.4.7 -).

6.5.3 - Operating Settings (DSP)

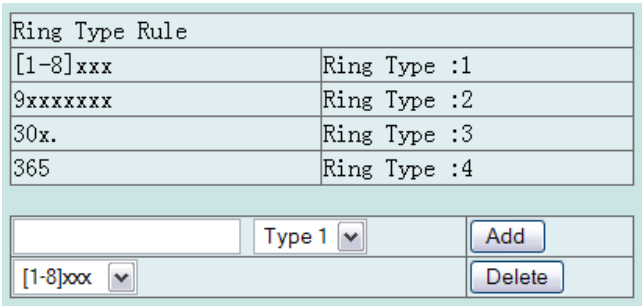
In the **DSP** section you will find the V-IP400P operating settings.



SETTING	DESCRIPTION
Coding Rule	You can choose amongst the following audio codecs: • g711Alaw64k • g711Ulaw64k • g729
G729 Payload Length	Payload length for the G729 audio codec.
Signal Standard	Select this option to adjust the phone signalling (tones) to the predefined standard.
Ring Type	You can choose between 8 different ring-tones.
Input/Output volume	Here you can set the audio level of the headset.
Handfree Volume	Here you can set the audio level of the speakerphone.

Ring Volume	Here you can set the audio level of the ring-tone.
Handdown Time	Here you can set the timeout used to determine when a call is ended and when a call is put on hold ('flash').

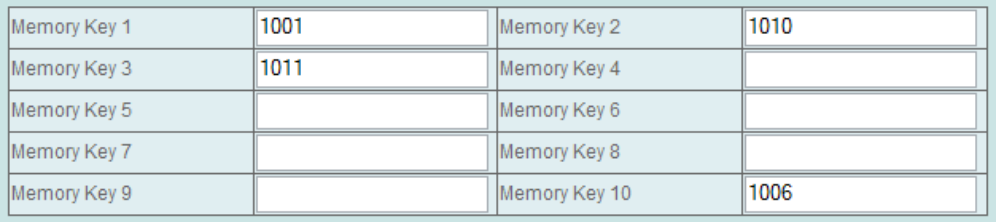
Furthermore, following the syntax below you can assign a ring-tone to any number or group of numbers.



Here you can either assign a ring-tone to a single number or use the syntax explained in section 6.5.1 - to enter group of numbers that use the same ring-tone.
To remove any of the rules you can select it from the drop-down menu and press **Delete**.

6.5.4 - Memory Key Settings (Memory Key)

In the **Memory Key** section you can assign extension numbers to the V-IP400P memory keys.



When the phone is connected to its V-IP400E memory extension, this section will list 20 additional memory keys.

NOTE Once the memory keys have been configured, you need to save the new settings and reboot the telephone.

6.6 - Configuration Management (Config Manage)

In this section you can either save all settings (**Save Config**) or revert back to the default settings (**Clear Config**). All saved settings are retrieved when the phone is switched on.

6.7 - Firmware Update (Update)

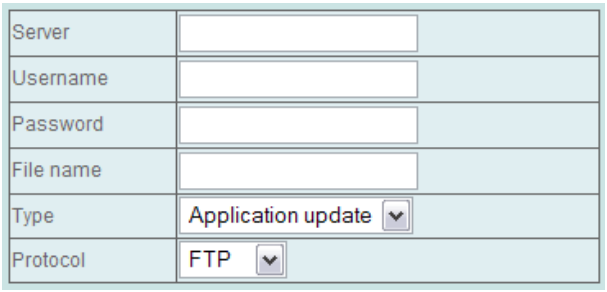
In the web interface you can configure the V-IP400P firmware update as well as import/export settings.

6.7.1 - Online Update (WEB Update)

In the **WEB Update** section you can upload up-to-date firmware (from a file with extension 'z') or a list of new settings (text file). Select the file and then press **Update**. Once the file transfer is complete, the phone will apply the new settings and will restart.

6.7.2 - Update through TFTP/FTP server (FTP Update)

In this section you can enter the FTP server's settings.



Here you need to enter the server's IP address (**Server**) and, if required, the authentication details (**Username** e **Password**). Then select the **Protocol**, choosing from FTP and TFPT (no authentication required) and enter the Type of operation:

- **"Application update"** to replace the firmware using the file specified in **File name**.
- **"Config file export"** to export the phone's settings into a text file, specified by **File Name** (the old file will be overwritten).
- **"Config file import"** to import the phone's settings from a file specified by **File name**

The phone will connect to the server to upload/download the file.

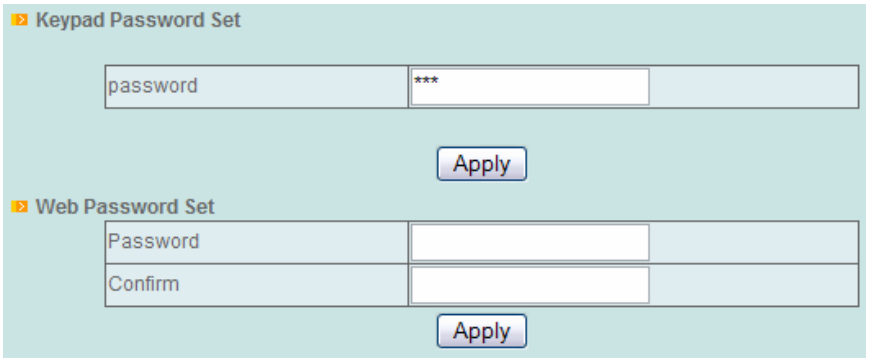
NOTE The user must have the required network privileges to connect to an FTP server requiring authentication.

6.8 - V-IP400P System Management (System Manage)

Here you will find a selection of advanced settings for the V-IP400P.

6.8.1 - Account Management (Account Config)

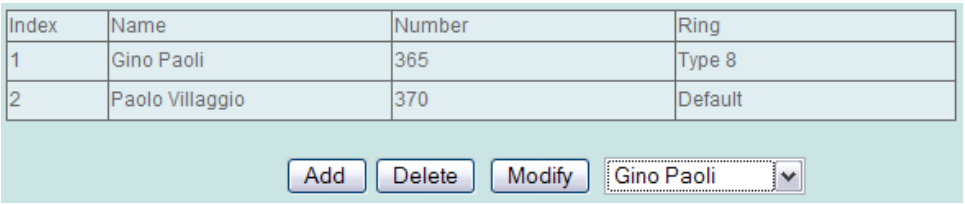
In the **Account Config** section you can change the password for the settings menu', accessible by pressing the **MENU** button on the phone, (**Keypad Password Set**, default value = **123**) as well as that for the web interface (**Web Password Set**, default value = **admin**). We recommend changing both passwords the first time you access the system.



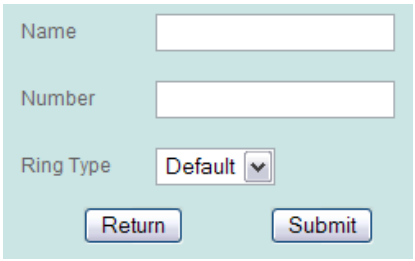
NOTE In case you no longer have the old passwords, you can reset them to their default values by following the steps described in section 5.7 - .

6.8.2 - Contact List (Phone Book)

In the **Phone Book** section you can define the settings of the V-IP400P contact list.



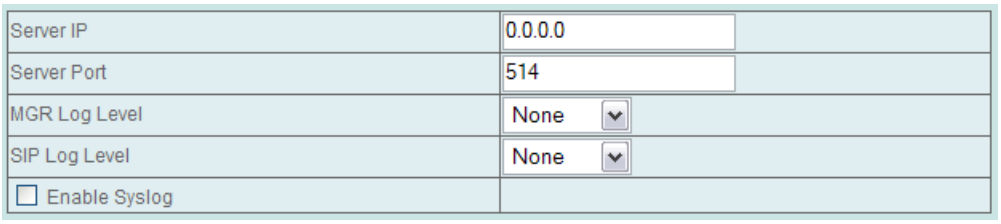
Press **Add** to enter a new contact. After typing in all details (including the ring-tone associated to that contact) press **Submit** to save or **Return** to exit without saving.



To delete or change the details of any of the contacts saved, you need to select the contact from the list and press **Delete** or **Modify**.

6.8.3 - Syslog (Syslog Config)

In this section you can define a 'syslog' server storing all log files for the phone. This function should be enabled only if the system is not working correctly or if there was an explicit request from VOIspeed technical support team (tick *Enable Syslog* checkbox). When this function is enabled, you need to have an active syslog server connected to the same network on which you have connected the V-IP400P.

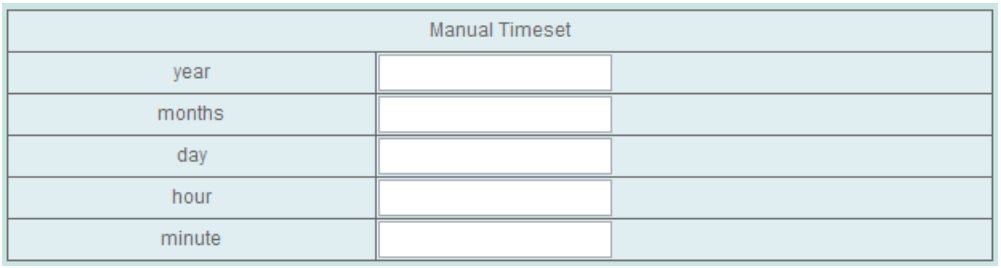


You will need to enter the following details:

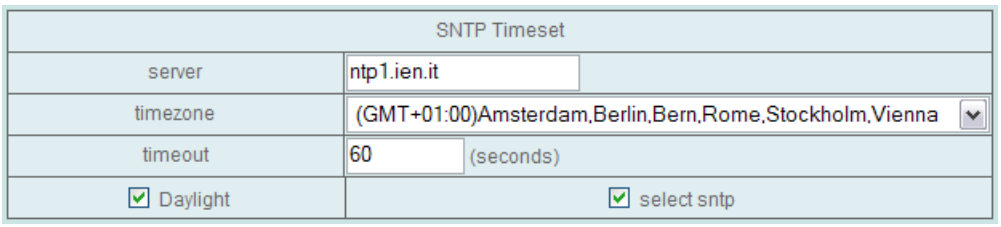
- Syslog server's IP address.
- UDP port used by the server (default value: 514).
- MGR log (0..7) to set the level of details of the phone's log files.
- SIP log (0..7) to set the level of details of the log files relating to SIP traffic.

6.8.4 - Time Setting (Time Set)

In **Manual Timeset** you can manually setup the system's time and date.



Alternatively, in **SNTP Timeset** you can enter the details of a network NTP server that will be responsible for automatically update the phone's time and date.



Here, **timeout** is the interval of time between two updates and **Daylight** is to setup the daylight saving time.

NOTE Manual time settings are lost when the V-IP400P is rebooted.

6.8.5 - Restarting the V-IP400P (Reboot)

In the **Reboot** section you can restart the phone using the web interface.

7 - V-IP400E Extension Module

The V-IP400E module adds 20 memory keys to the V-IP400P phone. In order to use this module, all you need to do is to connect the V-IP400E to the MOD port of the V-IP400P using the cable provided. The 20 additional memory buttons can be configured in the same way as the V-IP400P memory keys (see section 4.5 -).